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Envy as Predicted by the Stereotype Content Model: A Volatile Ambivalence

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History suggests that high-status groups are often the targets of genocide (Staub, 1989). During social upheaval and threat, envied social groups often become the targets of the most severe types of harm—attempted elimination en masse. Concurrently, these groups have often been the most respected, even if resentfully, and as such, have been often cooperated and associated with on other occasions (Cuddy, Fiske, & Glick, 2007). This strange mix of both respect and dislike make this ambivalent emotion very complex and volatile. Exploring the mechanism behind this complexity may help explain the two apparently contradictory behaviors displayed toward envied groups.

People have an affective response to others based on their perceived social category (Fiske, Lin, & Neuberg, 1999). This group-based affect is influenced by the target's perceived warmth and competence (Fiske, Cuddy, Glick, & Xu, 2002), and affects subsequent behavioral tendencies toward the target (Cuddy et al., 2007). One such group-based emotion is envy, an ambivalent reaction that entails both admiration and dislike to social targets (Fiske et al., 2002). Envied targets elicit obligatory association but often also elicit active harm when social contexts allow it (Cuddy et al., 2007). This chapter will discuss the mechanisms of this volatile ambivalent social emotion within the context of social psychological research and neuroscience. In addition, the chapter will address social psychological questions using both neuroscience and questionnaire data. First we will describe envy as an ambivalent emotion; then will place it within the stereotype content model of intergroup emotions; and then will examine its cognitive, neural, and behavioral concomitant. Examples come from our program of research.

Envy as Ambivalence

Before we begin to discuss envied groups, it is useful to locate envy as an ambivalent emotion within the emotions literature. Even though people in general are perceived as positive stimuli (Matlin & Stang, 1978; Sears, 1983; Taylor & Brown, 1988), prejudged affective reactions are sometimes purely negative. For instance, when participants were told that they were about to interact with a schizophrenic, their nonverbal behavior indicated that they were uncomfortable (Neuberg & Fiske, 1987). This negative affective response contrasts with their reaction when told they were about to interact with heart patients, a social group that typically elicits the ambivalent emotion pity. This example illustrates category-based reactions that include positive, negative, or mixed emotional reactions to other people.

Because of the range of emotions elicited by people, a distinction between the bipolar positive-negative affective reactions might seem appropriate. However, this distinction does not usefully describe people's affective experience because positive and negative emotions are often uncorrelated over time (Abelson, Kinder, Peters, & Fiske, 1982). What is more, even within one pole, the overlap is not complete. For instance, anger and fear are two negative emotions, yet anger causes approach or movement toward a target, whereas fear causes avoidance or movement away from a target (Niedenthal, Krauth-Gruber, & Ric, 2006). These two negative emotions thus have very different behavioral consequences. Similarly, ambivalent emotions such as envy also inspire contrasting behavioral tendencies (passive association and active harm, as just noted). The point is that mere positive-negative polarity is insufficient to describe emotions.

Furthermore, the broader literature on emotion has not agreed on an alternative structure of emotion (Niedenthal, Krauth-Gruber, & Ric, 2006). Problems arise as these definitions shift across studies, causing the structure and function of emotion as a psychological experience to shift as well. The hindrance to a consistent definition lies in the messy nature of emotional experience itself; emotions are viewed as largely consciously experienced affective states.

The inclusion of consciousness in this default definition raises difficult questions, among them: How do emotions differ? Addressing this question entails a distinction between structure and function. Referring to the structure of the emotion is a mainly descriptive exercise that reports on the cause, composition, and experience of the emotion. For example, the structure of envy can be described as ambivalent, or a mix of both positive and negative feelings. The function of emotion discusses the purpose or motivational significance of having the emotion. The function of envy is a much more complicated answer; the remainder of this chapter attempts to explain envy's functional significance through the neural and social mechanisms driving the emotion, as well as by taking its structure into account.

Initially, we describe the social psychological theory, the stereotype content model (SCM), which we use to predict social groups toward whom participants report envy. Social targets that elicit envy are viewed as significantly different on two core dimensions of social cognition and on the basic factors that define being human. These dimensions

appear in a discussion of the SCM, and the basic humanity factors appear in the context of neuroimaging work that establishes the medial prefrontal cortex (MPFC) as necessary for human perception. Central to the SCM is the social structural variable social status. We then examine the literature on both status and the correlated variable power. Next, we turn to the Behavior from Intergroup Affect and Stereotyping (BIAS) map, which uses the SCM to make behavioral predictions about each quadrant of its affective space, including the envy quadrant. Finally, we extend this discussion of behavior by examining the concept of *schadenfreude,* relating it to genocide.

Envy Within the Stereotype Content Model

Prejudice research has long suggested that the affective group-based reaction people elicit in others is more complex than simple like/dislike (see Allport, 1954). Most of these affective reactions are feeling states uniquely targeted toward social beings, suggesting that a category of emotions is reserved for the intricate social relations people forge with others. Although this may not seem like a complicated suggestion, examining the emotions themselves is not simple. One approach is simply to have people self-report the experiences of these feeling states. However, because these feeling states occur in a social context, a self-report request influences that social context, possibly because of self-presentational concerns, and many people do not subjectively report the exact nature of these feeling states. Envy is one such complex social emotion. It implies grudging respect or admiration and simultaneous intense dislike of that person. As a result, people often do not admit experiencing envy, resulting in self-report data that at best could produce weak experimental effects. Research on a number of complex social emotions often suffers as a result because subjective reports are tainted and unreliable. Also, there is not consistent use of the emotional label, particularly for a mixed emotion such as envy; the word itself may be used to convey more benign or more hostile feelings (Foster, 1972). This approach therefore often leads to inconsistent results in the literature. For instance, some studies tap more benign envy and show no link between envy and *schadenfreude* (Hareli & Weiner, 2002), whereas others tap more hostile envy and do find a link (Smith et al., 1996). Researchers have rarely studied intergroup envy, perhaps in part for these reasons.

Nevertheless, there is some work in the literature on envy as an intergroup emotion. This work includes an intergroup study measuring admiration (Alexander, Brewer, & Livingston, 2005), an internation study measuring jealousy (Alexander, Brewer, & Herrmann, 1999), another hypothesizing jealousy (although there is debate as to whether envy and jealousy in this context are the same emotion; Smith, 1993), and our work specifically targeting intergroup envy (Cuddy et al., 2007; Cuddy et al., in press; Fiske et al., 2002; Fiske, Xu, Cuddy, & Glick, 1999). Our work uses various strategies to circumvent the undesirability of self-reported emotions such as envy. The first strategy asks participants to report societal emotional reactions to groups. Participants are more likely to report that people in society envy particular groups rather than that they

themselves experience the emotion. The second and more indirect strategy to capture envious reactions to social groups is to have participants rate the groups on trait warmth and competence; envied groups are seen as competent but not warm. Research on the SCM uses both approaches and demonstrates that the interaction of perceived warmth and competence elicits unique affective responses toward different clusters of social groups. Trait warmth and competence are the two basic dimensions of person perception (Fiske, Cuddy, & Glick, 2006), with warmth assessing good or ill intention and competence assessing the ability to enact those intentions.

Social structure predicts these stereotypic traits. Groups or individuals viewed as exploitative or competitive are viewed as having ill intent, not warmth, whereas those viewed as cooperative are viewed as having good intentions and therefore are warm. On the competence dimension, high-status predicts perceived competence, and low status the opposite. The societal space created by these social structures builds on Smith's (2000) individual social comparisons of assimilative (cooperative)—contrastive (competitive) comparisons and upward (high status)—downward (low status) interpersonal comparisons.

The SCM's warmth-by-competence space locates societal groups in relations to each other. Within the SCM, social groups perceived as high on both warmth and competence elicit the positive complex social emotions pride and admiration. These emotions are usually reserved for the in-group and cultural defaults (middle-class and Christians in U. S. samples); pride implies that members of these groups are admired and respected. These groups receive both active and passive benefits; people associate with them (passive) and also help them (active).

Groups perceived as low on both dimensions elicit the basic emotion disgust and accompanying contempt. This emotional response is basic, in that it is not reserved only for people (objects can elicit disgust without any link to people). Allegedly disgusting social groups (homeless people and drug addicts in U. S. samples) are often dehumanized; that is, they are perceived as less than human. These groups receive both active and passive harm; people neglect and ignore them (passive) but also sometimes attack them (active).

Groups perceived as high on warmth, yet low on competence, receive the ambivalent social emotions pity and sympathy. These affective responses (elicited by the elderly and the disabled in U. S. samples) imply liking but disrespect. These groups receive the complex combination of neglect (passive harm) but also help (active benefit). The institutionalization of older and disabled people illustrates this ambivalent combination.

Finally, social groups perceived as high in competence yet low in warmth elicit the ambivalent social emotion envy and sometimes jealousy. This complex social emotion is reserved for high-status out-groups in all samples (e.g., business people and rich people); envy can be a volatile affective response. These groups receive passive benefits because other groups associate with them on account of their high status and resources. But these groups also sometimes are attacked on account of being privileged outsiders. So envy elicits resentment and the volatile mix of association under stable conditions and attack under unstable social conditions.

To the extent that a group's status is ascribed and not earned, this may increase the likelihood that people perceive their advantage as arbitrary or unfair (see Feather & Nairn, 2005). However, given how closely people associate competence with status, the SCM predicts and finds that people reason backward from status, irrespective of how it was gained, and are somewhat motivated by system justification to believe those groups must be competent to have gotten where they are. Hence, the envied groups receive "grudging" respect for competence but no credit for kindness, so they are resented at the same time as envied.

Researchers have attempted to distinguish envy from resentment (Rawls, 1971; Smith & Kim, 2007). However, the SCM makes no such distinction. Groups are envied because their advantage is perceived as exploiting others in society, including societal prototypes and aspirational reference groups. To the extent that high-status groups seem to use their competence and their position to serve themselves instead of others, they evoke resentment. To the extent that they possess desirable resources (one definition of status), others wish to possess those resources, but the envied group's alleged competitiveness means that it will not share those resources. Hence, it invokes envy instead of admiration.

To focus on the envied groups—our charge in this chapter—we compare them to their closest neighbors in intergroup space. Both envied and admired groups are high status and perceived as competent, so the envied groups differ from the admired groups only in perceived warmth. Both envied and disgusting groups are competitive, in the sense of exploitative and not warm, so the envied groups differ from the disgusting groups in perceived competence. Consider, then, these differences as indicating features that fuel the emotion. For instance, high-competent social groups are generally admired, but the lack of warmth attributed to envied groups may account for the extreme active harm displayed toward them in times of social unrest. Conversely, low-warmth social groups are perceived as not human, but a high level of perceived competence may explain why the envied groups are seen as supra-human, or more like automata, instead of less than human (Haslam, 2006). This describes the combination of respect but dislike of envied groups as described above, but not quite human, and so perhaps deserving their downfall. Let us take this comparative approach to understanding envy into the next section that discusses traits people perceive as necessary in people, or indicators of humanity.

Traits Conveying Humanity

Begin with the worst kind of dehumanization. Social groups perceived as low on both warmth and competence are the targets of dehumanized perception (Harris & Fiske, in prep.). As noted, these targets elicit the basic emotion disgust (Fiske et al., 2002). The disgust reaction correlates with people failing to imagine their inner life. That is, people do not mentalize—infer the content of the minds—of these dehumanized targets (Harris & Fiske, in prep.). They do not spontaneously imagine their personalities, goals, or feelings, as people do for in-groups and for most other out-groups.

One indicator of this dehumanized perception emerges in neuroimaging data showing that a socially attuned part of the brain simply does not come on line anywhere near as much when people perceive disgusting groups. These targets uniquely fail to activate above threshold a part of perceivers' brains (medial prefrontal cortex-MPFC) that is necessary for person perception (Harris & Fiske, 2006, in prep.). In these studies, participants saw pictures of social targets and rated them on a variety of human traits, as well as the emotions predicted by the SCM: pride, pity, disgust, and envy. Participants also saw pictured social targets while their neural activity was recorded using functional magnetic resonance imaging (fMRI). The dehumanized targets were rated significantly lower on a number of traits central to humanized perception, including warmth and competence, social interaction traits (similar, familiar, likelihood to interact), mentalizing dimensions (perceiver ability to mentalize, ability to infer dispositions), folk psychological markers of humanity (intelligence, articulate), and typical humanity. All these measures, as reported in the cited studies, converged on a view of these lowest of the low out-groups as being somehow less than human.

The same studies provided previously unreported data on the supra-humanization of envied out-groups. Participants also rated social targets from envied social groups on trait dimensions indicative of humanity. In a between-subjects design, participants rated a single envied social target on dimensions previously shown to differentiate dehumanized targets from other social targets. Envied social targets were rated significantly higher than other social targets on a series of dimensions related to competence and status, as SCM predicts: competent, articulate, intelligent, and control over own situation. They were also rated higher on dimensions related to passive association, as SCM predicts: familiar, similar, perceiver's ability to infer the target's mental state, and perceiver's ability to infer the target's disposition. They were rated significantly lower on dimensions related to human warmth and emotion: target's ability to experience complex emotions, ups and downs in life, self-awareness, and typical humanity.[1] In a separate repeated-measures study, participants rated 61 envied social targets significantly higher than other targets as SCM predicts: on the emotion envy, and both a competence composite (competent, capable, skilled) and a passive association composite (similar, familiar likelihood of interaction). They were also rated significantly lower on the emotion pity, which differentiates them from their opposite ambivalent cluster.

These results—compared to the results for the dehumanized targets—suggest that envied social targets experience a different type of nonhuman perception than the disgust-related dehumanized perception of homeless people and drug addicts. The envied targets were rated significantly higher than other social groups on the same dimensions (status, competence, passive interaction) on which dehumanized targets were rated significantly lower. However, both targets were rated as not typically human, compared with warm groups that elicit pity and pride.

How do the two kinds of nonhuman perception differ? Envied social targets are viewed as less emotionally complex, as having less experience with adversity, and less self-aware, although more in control over their situation. This suggests that envied humanity is not only a different kind of humanity, but it may be hypercompetent and

devoid of emotionality, adversity, and self-awareness. (Mr. Spock, of Star Trek, comes to mind.) This type of supra-humanized perception may be a desirable humanity, because envied targets are seen as similar, familiar, and likely to be associated with, and participants report that it is easy to infer their mental states and personality. The reported behavior displayed toward envied targets is consistent with one of the behavioral tendencies toward these targets, described earlier—namely, passive association.

This is a crucial piece of the puzzle, given that it bridges the gap between passive association and active harm. Even if we respect a group and engage in passive association with them, negative reactions can arise if targets are perceived as competitive. These negative reactions can justify resentment, leading individuals to penalize envied targets on moral and warmth dimensions when they are unable to do so on competence dimensions. Once engaged in this downward comparison/coping process where people deny them their humanity, it makes it easier to actively harm them.

Thus, the other reported behavioral tendency toward these targets is active harm. People are likely to harm targets with whom they do not empathize, and targets who are perceived as not having internal mental states and emotions. However, whereas dehumanized (low-low) targets often receive active harm, it is often not on the scale of mass killing or genocide, a behavior historically reserved for envied groups. Philosophers have argued that a part of what makes people human is their ability to feel (e.g. Appiah, 2006), and the perception of envied targets as not being able to experience complex emotions, adversity, or self-absorption, may explain the difference in their perception from the dehumanized targets. Targets who elicit disgust do not differ on these dimensions but are significantly lower on warmth instead. The supra-humanized, envied groups maybe deserve active attack because allegedly they are superior and threatening, and do not have any feelings anyway.

Consider recent preliminary evidence from social neuroscience that supports the ambivalent nature of the affective response to envied groups (Harris & Fiske, in prep.). Social neuroscience data show that perceived warmth correlates with activity in the MPFC during perception of dehumanized groups (Harris & Fiske, in prep.). Recall that the MPFC is the region crucial in social perception, and less active during dehumanized perception (Harris & Fiske, 2006, 2007, in prep.). We will therefore focus on the MPFC, as a brain region apparently necessary for social cognition (although implicated in other processes). We will also consider the amygdala, a subcortical area implicated in vigilance. We will examine these activations in the context of the traits that indicate perceived humanity, from dehumanized to supra-humanized perception.

Toward a Social Neuroscience of Envy

The MPFC is especially active when participants perceive envied targets (Harris & Fiske, 2006; in prep.). The activation is often greater than any other social group. Why would envied groups especially activate areas that reliably differentiate humans from objects (Harris & Fiske, 2006, in prep.; Mitchell, Banaji, & Macrae, 2005; Mitchell, Heatherton, & Macrae, 2002; Mitchell, Macrae, & Banaji, 2005)?

The envied groups' specific part of the MPFC overlaps the para-anterior cingulate, itself part of a reward network involved in person perception and social cognition. In fact, this particular region responds to people as positive stimuli (Harris, McClure, van den Bos, Cohen, & Fiske, 2007), suggesting that there is possibly a motivated component to envying perception. For example, because envied groups hold resources, one might anticipate rewards in interacting with them. This area is also involved in dispositional inference and mentalizing, suggesting that people seek to infer the mental states of envied targets, and as we suggest in the next section, this characterizes responses to high-status others in general. The point here is that this mentalizing process separates envied perception from dehumanized perception, consistent with the stereotype content differences. Both groups lack perceived warmth, but the envied groups have perceived competence, so one wants to know what they are thinking.

The other neural structure of interest here is the amygdala, which also activates when participants perceive envied targets (Harris & Fiske, in prep.). This subcortical area is involved in fear learning and vigilance as part of the fight-or-flight response in humans (Phelps, 2006; Whalen, 1998). Described differently, this neural region responds to emotionally salient stimuli in the environment, possibly directing attention to such potentially significant stimuli. This activation fits perceiving envied targets as low on warmth. Low perceived warmth suggests that the perceiver infers that the target harbors ill intent and therefore is potentially harmful and requires vigilance. Dehumanized targets also activate the amygdala, suggesting that low warmth in particular, not envy per se, may underlie the activation. Nevertheless, this area of the brain is responsive to the envied targets, and it does suggest at minimum that these social targets are more emotionally arousing than other social targets.

This pattern of neural activations may suggest that envied targets receive a special kind of mental processing. If both the MPFC and amygdala activate during perception of these targets, then it suggests that although people may think about the mental states of envied targets and even regard them in a positive light, they also react with vigilance. These activation patterns are consistent with the ambivalent nature of the emotion envy, and they support the ratings data.

Status, Power, and Envy

Research in social psychology defines power relations between groups as a structural feature of society that allows social stratification or the evolution of status hierarchies (Dépret & Fiske, 1993; Sidanius & Pratto, 1999). Status and power are overlapping but independent concepts. Social identity theory, for instance, lumps power, status, and prestige together as interchangeable variables (Hogg & Abrams, 1988). We separate social status from power conceptually but note that they often correlate in the real world. Status denotes a group's place in society's hierarchies; power denotes the holding of resources. Both these correlated concepts play a role in envious perception, and both provide clues as to the particular patterns of neural and behavioral data reported thus far

to the envied. (See also Gilbert, Price, & Allen's [1995] distinction between resource-holding potential and social attention–holding power.)

People attend upward, individuating and forming a more comprehensive impression of high-status or high-power individuals and groups (Fiske & Berdahl, 2007). Envied targets belong to high-status groups within the SCM framework, suggesting that people may pay more attention to those perceived as highly competent, able to enact their intentions, and controlling resources. Yet, because they are not the in-group, they cannot be expected to share the group's goals, by definition of what makes a group a group (Fiske & Ruscher, 1993). Thus, high-status out-groups require attention and motivate mentalizing because of their status and power. One wants to know their intentions. Indeed, outcome-dependency predicts attention and inferences about the dispositions of someone who controls resources—that is, someone with power (Dépret & Fiske, 1993). This assertion fits the social neuroscience evidence; that is, the MPFC is associated with mentalizing processes, and the amygdala is associated with vigilance.

Why would status per se (as apart from its correlation with power) elicit the negative affect that composes envy? Negative affect is clearly generated toward high status groups when their position is seen as illegitimate or not shared with the in-group's interests. High status entails influence, but the out-group status implies no shared or common intent.

Another type of negative affect may result from resentment of the social status hierarchy itself. Social status, unlike power, is a social structural feature conferred on an individual or group by a consensus—it is socially created. This, we argue, follows from the mere existence of social status hierarchies. Envied groups bear the brunt of this complexity due to their privileged place.

However, envy is not all negative. Status does lead to positive consequences for those at the top of the hierarchy. If status is conferred socially, then it suggests that the group awarded that position is in some ways recognized by society as deserving. High-status groups are also respected and admired, suggesting that this social designation, with all its negative consequences, is still a desirable outcome. Society recognizes that this group is valuable and deserves to be considered superior in some sense to other groups. This explanation is loaded with ambivalence, but it does indicate a positive side to high-status positions intrinsic in the high-status label itself as a socially conferred position. Therefore, high-status groups may be disliked for the social power intrinsic in their position and the possibly illegitimate nature of that position but also sit in a positively regarded position within society.

Active Harm to the Envied

So far, our emphasis on attention, vigilance, and mentalizing fits best the behavior of passive association with envied groups because they have high status and often high-powered control over resources. We have neglected active harm that is also part of the behavior directed toward envied groups.

Envy is an emotion that communicates "you have something that we value, and we would like to take it away from you, if we can." Status admits value, but group competition implies the desire to acquire the other group's resources. Several theories emphasize ideologies that both legitimate status hierarchies, with some groups on top, and recognize competition between groups, with some groups winning while others must lose.

One ideology tends to emphasize economic competition and hierarchies. Social dominance orientation endorses the inevitability of hierarchy (Sidanius & Pratto, 1999). In a group-eat-group world, every group has to look out for itself, and high-status groups are simply the winners in a tough world. The losers resent their position, but their only recourse is zero-sum competition.

Another ideology—right-wing authoritarianism—tends to emphasize competing values in a dangerous world where conventions and conformity represent safety (Altemeyer, 1988). The in-group seeks high status in order to control lower-status out-groups and thereby to maintain social order. Other groups who have high status may promote values antithetical to the in-group, so the competition here is for intangible but vital values.

The most dangerous people score high on both these ideologies (Altemeyer, 2004). They are most likely to attack other groups that they see as illegitimately taking resources or holding an antithetical value hegemony. Legitimizing ideologies such as social dominance orientation and right-wing authoritarianism are candidates for predicting active attack against envied out-groups.

Belief in a just world (Lerner & Miller, 1978) also endangers envied out-groups but may ironically also lead to their acceptance. The belief that people get what they deserve tends to solidify the idea that high-status people are inevitably competent. This might seem flattering to envied out-groups, except that it justifies scapegoating. Only high-status out-groups would be competent enough to cause harm (Glick, 2002), and these are the ones that envious others want to bring down, a desire rooted in schadenfreude. A perceived, deserved high status inhibits attack under stable circumstances because high-status groups control resources that others desire—hence the passive association, going along to get along. But under social breakdown, when resource control is under contention (riots, rebellion), the high-status groups still represent competition. Even if the status is partially legitimated under the stable rules of an unequal society, that fact that the in-group does not share their goals makes it more likely that the in-group might attack, particularly if they feel threatened.

Schadenfreude

As we have seen, the behavioral consequences for envied groups comprise a volatile mix of reactions toward groups seen as competent but cold, eliciting grudging respect but resentful dislike. The mix of resulting behaviors is dangerous—going along to get along under social stability (obligatory association, patronizing their businesses) but active attack under social breakdown or other opportunistic settings (riots target their businesses

first, such individuals find their careers sabotaged). Moreover, when an envied group is in distress or suffering, envy predicts not only a lack of sympathy, empathy or willingness to help, but behavioral and neural responses related to the experience of pleasure and reward.

Schadenfreude refers to the experience of pleasure at another's misfortune (Heider, 1958). Previous research has identified several possible antecedents of schadenfreude, including perceived deservingness of the target (van Dijk, Ouwerkerk, Goslinga, & Nieweg, 2005), resentment (Feather & Nairn, 2005), and a desire to denigrate and correct injustice (Feather & Sherman, 2002). Nevertheless, we believe that hostile envy deserves closer consideration given (1) how potently it predicts schadenfreude (Smith et al., 1996; van Dijk, Ouwerkerk, Goslinga, Nieweg, & Gallucci, 2006), and (2) that it can arise out of mere status differentials between groups.

In any hierarchical social system, status discrepancies are enacted, recognized, and maintained by the respective constituents. This suggests that groups need not have extensive interpersonal contact or history in order to feel motivated to harm envied groups when group relations become unstable. If in fact active harm is accompanied by the experience of malicious pleasure, it suggests a dangerous reinforcement learning cycle, whereby pleasure reinforces enactment of harm and increases the likelihood that aggressive acts will be repeated subsequently. In other words, if it feels good to actively harm an envied group, harmful behavior is that much more likely to persist.

Because envied targets are seen as similar, familiar, and likely to be associated with, it is important to consider the role of relative social comparison. Whether participants actually are similar to envied targets is irrelevant as long as they perceive that they are or hope to be similar. Behavioral evidence demonstrates that envy specifically predicts schadenfreude when people are confronted with the misfortune of a relevant or comparable group or person. If people compare upward—which they do, given that envied groups are respected and admired—and feel similar to these groups, envy predicts endorsements of statements such as "I had to laugh a little," and "I felt good when my partner lost" (van Dijk, Ouwerkerk, Goslinga, Nieweg, & Gallucci, 2006).

Depending on the social context and groups involved, similarity or status differences may become more or less salient. Thus, the relative status of two groups, as well as the perceived legitimacy of the status, differentially matters. When a low-status observer is presented with a vignette in which a high-achieving target experiences a failure, observers report greater resentment and denigration toward the target and deem them more deserving of failure than when the target is reportedly successful with little effort. In other words, if low-status observers believe that high achievers did not earn their success, they are more likely to report feeling pleasure at their failures.

At the group level, feelings of inferiority and commitment to the group can moderate the schadenfreude response; as threat of inferiority and group identification increase, so do reports of malicious pleasure in response to a higher-status opponent's loss. However, schadenfreude is attenuated toward higher-status groups when their status is seen as legitimate, and observers are low in group identification (Leach, Spears, Branscombe, & Doosje, 2003).

Warmth

However, status is not the only predictor of envy. As we have reviewed, envious prejudice recognizes a group's perceived competence due to their undeniable status or success but also predicts lower perceptions of their warmth. Perceptions of warmth are related to how competitive people believe a group to be. Like perceptions of status, perceptions of competition contribute to the manifestation of schadenfreude. For example, for male participants, seeing the pain of a cooperative confederate activated pain-related brain areas, but seeing the pain of a competitive confederate activated reward-related brain areas, which correlated with perceived fairness and an expressed desire for revenge (Singer et al., 2006).

Conclusions

We have discussed research suggesting that envy is an ambivalent emotion related to perceived low warmth but high competence. People rate those they envy as supra-human and associate with them, yet attack them when the chips are down. Additionally, social neuroscience research corroborates these conclusions, showing that brain areas related to reward and threat are simultaneous active when perceiving the envied. This may help to explain the ambivalent behavior towards these groups.

We can integrate the work on envy by arguing for social stability as a barrier against active harm. Social stability works because of the perceived high competence of out-groups targeted by the envy. Their admired and desired traits lead to passive cooperation. But the volatile mix also includes a propensity toward active harm, so high-status, competitive out-groups need to remain aware of the very real personal dangers of social unrest.

Note

1. For the record, because these data have not been reported elsewhere, t values follow (all $p < .05$): competent $t\,(115) = 3.92$, articulate $t\,(115) = 5.87$, intelligent $t\,(115) = 3.62$, control over own situation $t\,(114) = 2.65$, familiar $t\,(115) = 2.39$, similar $t\,(115) = 2.09$, perceiver's ability to infer the target's mental state $t\,(115) = 4.09$, perceiver's ability to infer the target's disposition $t\,(115) = 3.69$, target's ability to experience complex emotions $t\,(45.79) = -2.04$, ups and downs in life $t\,(41.93 = -3.43$, self-awareness $t\,(114) = -2.56)$ and typical humanity $t\,(114) = -3.34$.

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